



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Sang J. Choi

**TITLE: BURGLAR ALARM**

Application No.: 10/608,955

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Examiner: Devetta W. Goins

Art Unit: 2632

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT**

**(Remarks)**

In reply to the office action dated May 20, 2004,  
Please amend the application as amended in Claims 1 to 18  
and Specifications.

Respectfully Submitted,

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## REMARKS

1. I appreciate the examiner for her effort and time for laying out the contents of claim 1, more methodically.

2. Claim Rejections - 35USC; 112

Rejections under this category are all corrected.

3. Claim Rejections – 35USC; 103

Base claims 1 and 9 are rejected as being unpatentable over Foseide (US pat. 6,337,633) and Sanders (US pat. 5,663,711). The above patents are working if an appliance is connected to a wall outlet without having a main AC power switch. However,

a) in an electrical equipment or computer laboratory environment, if all devices are controlled by a main AC power switch, the alarm system of the above patents are not functioning as expected. The present invention (my invention) functions normally irrespective to the state of the main power switch of an electrical device.

b) If the power cord of an appliance of the Foseide art is broken or cut, the alarm is not activated.

c) While the present invention uses a simple electronic component as a unplugging sensor device, Foseide art uses a mechanical

switch. He did not specify the physical structure. However, Pat. # 6,150,940 shows a mechanical switch structure which looks very complicated to manufacture.

- d) While my invention uses 2 wire normal power cord, Foseide art uses specially made cable which carries multiple wires (minimum 6 wires). It may be very inconvenient to use the apparatus for a notebook computer.
- e) As the alarm control circuit, Foseide uses a microprocessor and several other IC chips. On the other hand, my invention uses only one CMOS IC chip which consumes very little power. Thus my apparatus can be made very compact and convenient to be applied to systems like notebook computer.

#### CLAIM CHANGES OR ADDITION:

##### Claim 16 (c):

In the specification, lines 19, 20 on page 5 specifies that a battery charger is an optional feature.

##### Claim 16 (d):

In the specification, lines 2 - 6 on page 8 specifies that (81), (82), (83), and (84) are voltage divide resistors which are included in the DC continuity current path. The current path

passes through the power plug and the alarm circuit. (82) and (84) are connected between the input of the voltage level detector and ground. Thus they can be physically located either in the power plug or in the alarm circuit.

**Claim 16 ( j ):**

In the specification, page 8, 9 specifies that voltage level detector (27), alarm activator (28) and timer (34) are NAND GATES. In the Fig. 1, pin numbers of (27), (28), and (34) are so arranged that they are all in one NAND GATE chip.

**Claims 17 and 18:**

These claims are evidenced by items (150), (100), (12), and (92) of Fig. 2, also specified by the lines 10 – 15 on page 11 of the specification.

**Claims 1 and 9:**

In these two claims, the phase “activated by detaching the alarm apparatus from the electronic device”, is added under the assumption that this is a minor change and it is still in the scope of the invention.